

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter serves as an introduction to the study. It presents a background on the education environment in Malaysia, with the focus on e-learning. The chapter contains the problem statement, the purposes of the study, the research questions, significance, scope, key terms and limitations of study.

1.1 Review of Education and E-learning in Malaysia

The world economy has reached a stage where human capital is the main key to competitiveness. Human resources, intelligence and productivity are critical forces in determining economic and national development. In order to produce quality manpower, a well recognized education system is very important.

According to a local magazine Business Network (December 2002), former Prime Minister of Malaysia Tun Dr. Mahathir proposed to make Malaysia a regional education center. In the Eighth Malaysia Plan, the education sector was given an important role of developing a pool of knowledge workers who are productive, innovative, trainable and knowledgeable.

Though there are many encouraging efforts being carried out towards this role, the percentage of young Malaysians enrolling in tertiary education was only 22% in 2001, based on the Youth Information Network (Business Network, 2002). This is a very small number compared to other countries like United States, where more than 70% of youth are enrolled in tertiary education.

In reviewing the reasons for Malaysia falling behind other countries in producing a higher percentage of educated population, one of the main obstacles could be the limited place available in institutions of higher learning in this country. Currently, Malaysia has less than 30 public and private universities, besides private colleges offering diploma, degree and postgraduate courses (Education Guide Malaysia, 2001). However, the capacity of these institutions to provide tertiary education to the 4 million populations in the 17-25 years old age group in the year 2020 is inadequate (Business Network, 2002).

Considering the large pool of Malaysians not having the opportunity to receive tertiary education, there should be efforts to give them another educational opportunity. One of the ways that has been widely used in the industrialized countries is providing technology enhanced learning or electronic learning (e-learning) to the adults. These groups of people are those who either could not obtain their degree during the age of 17-25 years old or those who wish to improve their academic qualifications. According to University of Botswana in South Africa (2001), e-learning is the appropriate use of information communication and technology in teaching and learning towards student oriented, active, open and lifelong learning. At the same time, Rosenberg (2001) has also acknowledged this new way of delivering knowledge in the digital era.

One of the characteristics of those enrolled in e-learning education method is that they are physically or geographically unable to attend scheduled classroom lectures and tutorials in the universities. As mentioned earlier, only 22% of young Malaysians are successfully enrolled in universities and there are many young Malaysians left out of tertiary education. This group of people are now either in the group of working adults or homemakers, or even retirees, who probably could not spare much time to attend conventional classroom courses. One possible way of reaching them is through

the Internet. According to International Data Corporation's research (<http://www.idc.com/getdoc.jsp>) in Malaysia, the Internet market reached 4.8 million in year 2002 and was expected to grow by another 17% thus reaching 5.7 million by end of year 2003. With this widespread usage of Internet, coupled with governmental moves in encouraging the education industry to utilize the convenience of World Wide Web, e-learning should receive a more active role in adult lifelong education in Malaysia.

E-learning, as a method evolved from distance education, has received special attention from public universities in implementing distance learning courses. Currently, there are two main education institutions in Malaysia offering e-learning based courses to the public. University Tun Abdul Razak (UNITAR) has operated since September 1998, while the Open University Malaysia (OUM) started operations in August 2000. Both universities offer certificates, diplomas, degrees and postgraduate courses to the public. Their students are not required to attend scheduled classes at the campuses. Students can download teaching materials from the Internet; attend tutorials, quiz and forums via the Virtual On-line Instructional Support System (<http://www.unitar.edu.my/elearning/child.html>). Meetings with lecturers and course mates are encouraged at the convenience of parties involved. Students can also gain access to the library anywhere, anytime, from any computer. Other public universities, such as the National University of Malaysia (Universiti Kebangsaan Malaysia), University of Malaya, University of Technology MARA and University Putra of Malaysia, are also involved in web-facilitated lectures and tutorials paving the way for fully e-learning. This is in line with Malaysian government's ambition to have 50% of the country graduates produced via distance education in the long run (Sunday Star, 26th April 1998).

1.2 Role of e-learning in Adult Lifelong Learning

Lifelong learning has come to involve a variety of learning experiences (Knapper and Cropley, 2000). These include formal university campus learning, workplace open learning, modular flexible learning programs, correspondence-based distance learning courses, and recently web or multimedia-based courseware. Of all these learning experiences, web or multimedia-based courseware learning is a very interactive and convenient way of learning. This form of learning, also called e-learning, emphasizes a convenient learning concept based on the learner's ability. Therefore, it has an important role in adult lifelong learning in this technology era.

The former Secretary-General of the Ministry of Education, Tan Sri Datuk Dr Johari Mat (Johari, 2000) described the many benefits of e-learning in the Malaysian education system. First, e-learning provides more learning opportunities to adults who are no longer in the formal education age range of 17-25 years. This is supported by Galloway (2000) who says that in the new education environment, the traditional 4-year degree of education has been evolved into 40-year degree to indicate a life time relationship between education and human beings. E-learning opens up a new platform for many adults who have been tied up with many commitments in life and enables them to learn anytime and anywhere they want at their convenience. Access to learning via the Internet has made geographical or physical constraints no longer a critical issue for adults to enroll in any course with any university where e-learning opportunities are available.

Secondly, e-learning also ensures quality in education since technology is able to provide interactivity and active learning. Lectures are constantly modified based on learner's feedback and hence enhance their understanding. The integration of many different rich resources like the virtual library, videos, diagrams and audio clips in the

e-learning environment could be easily utilized. Adults who are busy with their daily lives can be attracted to the convenient way of information sharing. In e-learning lectures, there is no problem of unmanageable class size or insufficient number of students to start the course. As long as there are students taking the course, they can attend the class anytime at any place they want. Hence, e-learning can be a way to produce a quality and innovative generation (Johari, 2000).

Thirdly, compared to conventional learning environment, e-learning can be a factor in changing the environment from brick to click. The Ministry of Education and organizations do not have to worry about building more concrete campuses to train and equip the working generation. According to Tan Sri Datuk Dr Johari Mat (Johari, 2000), the government spent almost RM 3.83 billion in the Seventh Malaysia Plan development expenditure on public higher education institutions. To ensure more learners enter universities, higher expenses are incurred. However, with e-learning, the cost of infrastructure can be reduced tremendously from the millions required to build a campus to thousands to have a complete network infrastructure. In the past, learners had to spend much of their time and money to get to the physical campus for lectures. The learners can now access the campus from their home without much traveling and being away from their families. It cuts the learning time and cost. Thus, it encourages more organizations to support e-learning education for their employees.

The Eighth Malaysia Plan emphasizes that innovation, research and development and the creation of more knowledge workers will be the key elements in the new economic models for Malaysia (Musa, 2002). The emergence of e-commerce and the K-economy has pressured the traditional learning or training methods to be redesigned to meet new paradigms and international standards (Johari, 2000). Malaysian manpower has to be more versatile and proactive to new economic and

industry requirements. In order to do so, e-learning can play a critical role by providing knowledge to the public in the most practical way. With many learning opportunities at the organization's or individual's convenience, the learners can choose courses that improve their competency and to the benefit of their working industry. The knowledge workers and interactive learning environment are factors considered by many foreign investors. Looking from the macro perspective, e-learning could be one of the ways for Malaysia to develop its global competitiveness in human capital.

From the above mentioned points, it is clear that e-learning has a significant economic, social and technological impact individually as well as nationally. However, the major source of education in this country is still the traditional classroom learning method. Whether in colleges, universities, or even workplace, people tend to look forward to some classroom scheduled lectures for learning. According to Ministry of Education statistics, student enrollment in the public and private education institutions was about 871,480 as of May 2001. These groups of student are engaging themselves in the traditional classroom learning method. For e-learning courses offered by UNITAR, the enrollment was less than 6,000 for the same year (Education Guide Malaysia, 2001). Comparing the figures, it is clear to say that Malaysia has a rather low enrollment in e-learning education. There are a number of factors that can influence the attraction towards classroom-based learning, despite the many factors favoring e-learning. One of these factors is the perception of adults towards e-learning. Therefore, there is a need to examine the perceptions of the public toward this method of learning, and the implications of studies to the institution of higher learning that conduct or are planning to implement e-learning.

1.3 Statement of Problem

Based on the website information from the University Tunku Abdul Razak (www.unitar.edu.my) and Open University Malaysia (www.oum.edu.my), the current e-learning courses offered are limited to business administration, engineering, education, social sciences, information and communication technology. Most of the public universities also offer limited e-learning courses. Since e-learning has significant potential for adult lifelong education, there is a need to find out what are the courses that are offered in the virtual universities and what are the e-learning courses that adult learners prefer.

Comparing the enrollment of e-learning courses in virtual universities and traditional classroom lectures courses in conventional universities, the former is still far behind. The reasons may be due to its limited range of courses and awareness or popularity of e-learning courses among the public. Adults are still inclined to conventional education methods that require sacrifices of extensive time and effort to complete the courses. This needs to be examined further as to what are the obstacles for Malaysians to use e-learning as an education method.

As mentioned in an earlier section, a high percentage of Malaysians are left out in the opportunities to further their studies in universities. After many years of working without tertiary qualification or some have become full time homemakers, are they willing to further their studies by using e-learning method? What could motivate them to participate in e-learning? What are the areas that interest them to study?

The working graduates today are facing knowledge and skill competitiveness. However, there are many opportunities for this group of people to improve themselves. One of the opportunities is by enrolling in e-learning courses to earn certification,

recognition or academic qualifications. As there are many options or choices available to further study, what are the criteria to consider when they look for e-learning course?

1.4 Purpose of Study

The main purposes of the study were:

- To gather feedback from instructors in local virtual universities on the e-learning implementation in their institutions and their views on adult learners' adaptation to this learning method.
- To understand the perceptions, acceptance and expectations of a sample of Malaysian adults on e-learning education.
- To identify the main motivations and obstacles behind Malaysian adults to use e-learning as a method for lifelong learning.
- To make suggestions to higher education institutions, on basis of the above findings, on success factors for e-learning education.

1.5 Research Questions

To achieve the above aims, this study aimed to answer the following research questions:

1. What are the general opinions of instructors in University Tun Abdul Razak and Open University of Malaysia on the e-learning method for adult learners in Malaysia?
2. How do adults perceive e-learning and how well can they accept this learning method?
3. What are the adults' expectations on e-learning programs and implementation, as compared to the traditional classroom method?

4. What are the motivations and obstacles behind Malaysian adults to use e-learning as a method of lifelong learning?
5. What are the Malaysian adults' perceptions towards success factors in implementing an e-learning program?

1.6 Significance of Study

This study has a number of potential benefits, and there are described below.

According to the research firm Web Market Education based in Vancouver, Canada, the worldwide market for e-learning reached US\$90 billion (RM342 billion) in year 2002 (Katz and Yablon, 2003). To prevent Malaysia education industry from losing out in this attractive market, this study is significant in providing an exploratory knowledge of e-learning education in Malaysia. Searching the literature and conducting interviews will produce an overview of e-learning courses/programs offered in education institutions.

The study also aims to examine success factors in implementing e-learning programs to attract adult enrollment. By doing this, institutions of higher learning should be able to effectively plan and implement better quality e-learning programs for adult learners. With good recognition and better acceptance from adult learners, e-learning can fully realize its potential in helping adults to learn in their lifetime. In the long run, e-learning method can play a more significant role in Malaysian education system by replacing some of the traditional classroom courses to reduce costs and improve quality of education.

This study seeks to provide an opportunity for the adult market to voice their views about e-learning education. The target market group can give ideas on what a good and effective e-learning course should be like, and they can also share their

concerns on e-learning education in the Malaysian institutions of higher learning. By conducting a survey on the prospective learners who are mature intellectually, the study aims to gain a better understanding of the adult perspective towards e-learning as an method for their lifelong learning.

The study also seeks to find out what motivates potential learners to choose e-learning courses/programs and the obstacles that come with it. Apart from that, the study also aims to find out what kind of environment encourages e-learning activities among adults.

For adults who are not aware of this learning method, this study can instill the awareness of e-learning and create a lifelong learning possibility for them. Their exposure to this study can trigger their thoughts and mind to further improve themselves. By becoming more aware of the e-learning method, adult learners can add values to their qualifications and skills.

1.7 Scope of Study

E-learning includes many forms of learning, ranging from web-based training in multi-million dollar corporations, to supported online learning in formal education as in the Malaysian Smart Schools, to informal knowledge gaining or learning by Internet users. The scope and power of e-learning are vast. This study however only focuses on fully web-based education in institutions of higher learning.

Considering the large market, a thorough survey is needed to prioritize this lucrative market value. To further examine the effect of e-learning, the study specifically chose the adult lifelong learning market. Adults with financial independence and with access to Internet facilities in Malaysia were the target respondents for this survey. This group of respondent included employees of

organizations, self-employed, home makers, or retirees from different ages but having at least a Malaysia Education Certificate (Sijil Pelajaran Malaysia, SPM) qualification as this academic qualification is the minimum requirement for entry into institutions of higher learning.

1.8 Definition of Terms

The terms frequently used in this study are defined below:

e-learning – also known as electronic learning or online learning is a form of open learning. It covers wide range of technologies and learning methods including both formal (e.g. online course) and informal (e.g. surfing the Internet) learning (Clarke, 2002). However, this study only focused on the formal e-learning where participation in online courses offered by higher education institutions is emphasized.

Internet – the Internet has been described by Bennet (2001) as an interactive, switched, networked and standards-based communication medium that has contributed significantly to many areas of endeavor and particularly to the learning and instructional processes.

Adult - Verner (1964) defines adulthood as more than the simple passing of prescribed age-barrier, since the age at which individuals reach psychological maturity differs. To simplify the research, adults are defined in this study as individuals with a minimum age of 25 and can logically make decision for themselves.

Program – based on the Oxford Advanced Learner's Dictionary (1995), and as used in this research, it is a series of items that line up on a course of study.

Lifelong learning - is continuous process of learning throughout a person's life. An in-depth definition can be found in Chapter 2.

Adult lifelong education – is a process of training or instruction, which is designed to provide knowledge and develop skills for an adult throughout his/her lifespan. In this study, this term refers to the planned, systematic learning activities designed for adults who have gone through the conventional Malaysia education system.

Motivations – refers to the encouraging factors coupled with determination that will push one to accomplish certain goal or task. In this study, motivation refers to the stimuli or incentives or positive reasons that push one to enroll/participate in e-learning program.

Obstacles – the negative factors or hindrances that block or stop one from progressing toward achieving certain goal or task. In this study, obstacles refer to the negative influences that hinder one to participate/enroll in e-learning program.

Perception – according to Collins Cobuild English Dictionary for Advance Learners (2001), perceptions are the opinions or beliefs that have been formed in a person's mind. It could also be explained as the state of being or process of becoming aware or conscious of a thing. Referring to the Oxford Dictionary, Thesaurus and Word Power Guide (2001), perception is the ability to hear, see or become aware of something through senses. It is a way of understanding or interpreting something. In this study, it will be the general impressions the adults have on e-learning.

Success factors – refer to the causes or influences that contribute to the achievements of a desired aim. In this study, success factors are the criteria or circumstances that contribute to the accomplishment of e-learning program.

Virtual university – refers to an institution that is offering fully online programs for public. This type of university does not provide any classroom lectures that require student attendance.

1.9 Limitations of Study

Though distance education has been used in Malaysia since the 1970s, the newly evolved e-learning is not widely implemented in most of the institutions of higher learning. As a result of this recent introduction, there is not much research or study specifically on e-learning in Malaysia. The scarcity of local literature on this subject to refer is one of the serious limitations of this study. This study has used much of the literature done by overseas institutions and tried to make it as relevant as possible to the local context.

Another limitation is that the study was carried out using a quantitative method in which questionnaires were distributed to the public. The opinions and comments obtained were limited to the options given. Due to time and resources constraints, individual follow up could not be carried out. Opinions outside the options given could not be obtained. The conclusions or recommendations are thus based on the given options of each individual towards e-learning.

This study is also limited to e-learning activities in Malaysian higher institutions of learning. Due to time and cost constraints, e-learning activities in organizations offering web-based training to employees are not included in this study. This study does not show the complete e-learning activities in Malaysia as it does not cover primary and secondary students. The scope of this study is limited to adults who had the minimum entry qualifications of SPM. Therefore, this study may not represent the views of all age groups in Malaysia.

This study used snowball distribution method to distribute the questionnaire and the respondents were chosen based on their willingness to participate in this survey. Therefore, majority of the respondents have similar demographic characteristics. Hence,

the perceptions of adult in this study towards e-learning do not necessarily reflect the perceptions of all adults in Malaysia.

1.10 Summary of Chapter, and Organization of Remainder of Report

The first chapter reviews the current e-learning position in Malaysia. It also explains the role of e-learning in adult lifelong education. The chapter then presents the problem statement, research questions, purpose, significance, scope and limitations of study.

The second chapter reviews the previous research on the relevant topics. The research methodology is explained further in Chapter Three. The findings of the study are presented in Chapter Four. The last chapter presents the conclusions and recommendations from the study, and based on the study's findings, presents suggestions to implement e-learning programs.